

## PRONGHORN HERD UNIT MANAGEMENT PLAN

Herd Unit #10A

Book Cliffs, Bitter Creek

September 12, 2008

### HERD UNIT BOUNDARY DESCRIPTION

***Uintah and Grand counties*** - Boundary begins at the Utah-Colorado state line and the White River, south along this state line to the summit and north-south drainage divide of the Book Cliffs; west along this summit and drainage divide to Ten Mile Knoll and the Steer Ridge road; north along the Steer Ridge road and Steer Ridge to Willow Creek; north along Willow Creek to the Uintah-Ouray Indian reservation boundary; north along this boundary to the Uintah-Grand County line; west along this county line to the Green River; north along this river to the White River; east along this river to the Utah-Colorado state line. **Excluding all Indian Trust Lands within this boundary.** .USGS 1:100,000 Maps: Westwater, Seep Ridge, Huntington, Vernal and Price.

### DESIGNATED PRONGHORN HABITAT LAND OWNERSHIP

#### HABITAT AND APPROXIMATE OWNERSHIP\*

Ownership	Yearlong range	
	Area (acres)	%
BLM	85,509	69
SITLA	23,377	19
DWR	0	0
PRIVATE	3,657	3
Ute Tribal Trust Lands	12,196	9
<b>TOTAL</b>	<b>124,739</b>	<b>100</b>

### UNIT MANAGEMENT GOALS

Manage for a population of healthy animals capable of providing a broad range of recreational opportunities, to include hunting and viewing. Balance the pronghorn population with human needs, such as authorized livestock grazing rights, private land development rights, and local economies. Maintain the population at a level that is within the long term habitat capability.

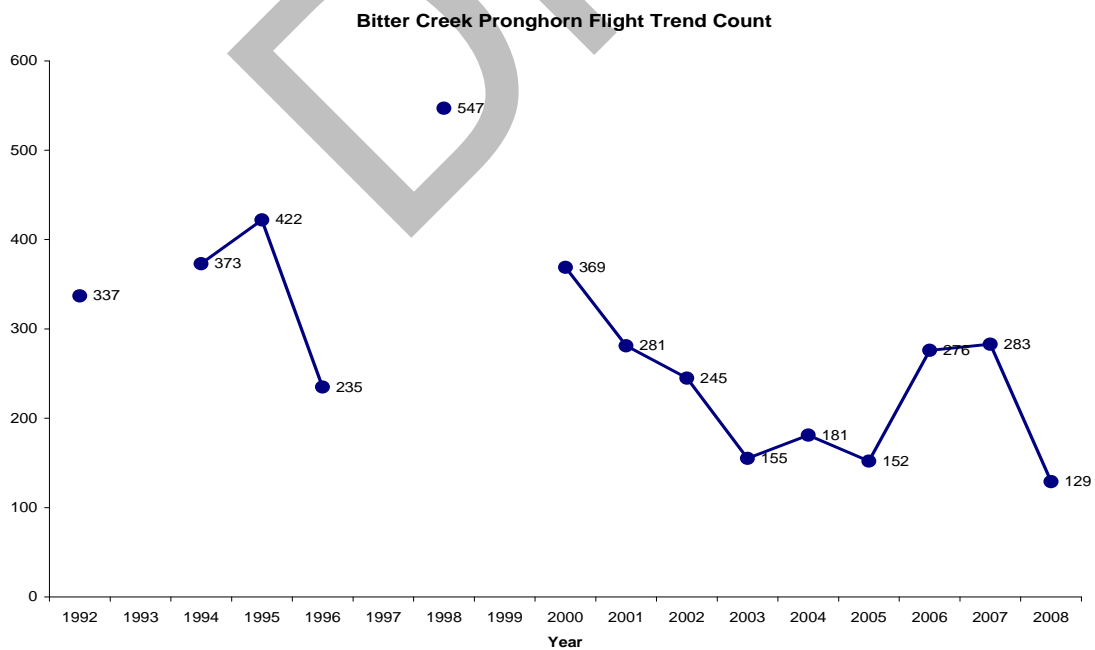
### POPULATION MANAGEMENT OBJECTIVES

- ✓ Target Winter Herd Size - Achieve an estimated wintering population size of 600 pronghorn distributed across the principle areas of the unit ( Archie Bench, East Bench to Seep Ridge and Wild Horse Bench. The management plan will be reviewed on five year intervals to assess herd parameters and the validity of management goals and objectives.
- ✓ Herd Composition – Maintain a minimum postseason/spring aerial trend count buck to doe ratio of 25:100.
- ✓ Population Status - The pronghorn population trend count has declined steadily since reaching a peak of 547 animals in 1998. The 2008 annual aerial trend count survey produced only 129 pronghorn. The following table and graph summarize the pronghorn population status as reflected through annual aerial spring trend count surveys.

## Bitter Creek Antelope Population Trend

	Observed	Bucks	Does	Estimated*	B / 100 D
1992	337	90	247	449	36
1993	no flight				
1994	373	108	260	497	42
1995	422	79	335	563	24
1996	235	60	114	313	53
1997	no flight				
1998	547	97	435	729	22
1999	no flight				
2000	369	99	270	500	37
2001	281	67	165	375	41
2002	245	58	171	325	34
2003	155	33	113	200	29
2004	181	37	138	250	27
2005	152	31	116	200	27
2006	276	47	201	370	23
2007	283	73	204	375	36
2008	129	27	102	172	26

\*assumes 75% sightability



## **POPULATION MANAGEMENT STRATEGIES**

- ✓ Population supplementation - Beginning in December 2008 and continuing through January 2013, supplement the existing pronghorn population by translocating animals from Parker Mountain, or other source herds based on availability. Based on availability of animals, the DWR may transplant up to 50 animals per year. These transplants would occur each year, or until the estimated population exceeds 80% of objective. Release sites will include East Bench, Archie Bench, Seep Ridge, and Wild Horse Bench.
- ✓ Monitoring - Aerial and/or ground counts will be conducted annually to determine fawn recruitment, population status, buck/doe ratios, and range distribution. Aerial trend counts will be conducted in late winter/early spring, pre-season herd classification will occur in July and August.
- ✓ Population - Hunts for bucks and/or doe/fawn antelope will be recommended annually as needed to meet management goals. These will be reviewed by the Northeastern Regional Advisory Council and acted upon by the Utah Wildlife Board.

## **Limiting Factors**

- ✓ Predation - Predation, especially by coyotes, can be limiting to pronghorn fawn survival and recruitment. Predator control work deemed prudent will be conducted within the guidelines of the DWR predator management policy/plan and the authorized plan of the administering land management agency..
- ✓ Habitat - Vegetative communities that dominate the areas of the herd unit frequented by pronghorn include salt desert shrub types on the lower elevation zones grading upward elevationally to Wyoming sage habitats. Annual precipitation generally varies from 6 to 8 inches in these vegetation types. Forb production is important for healthy fawn survival. Water distribution can be limiting but has been provided by the BLM and other conservation interests through guzzlers or other devices. During the past decade of drought, the poor maintenance condition of many of these artificial water sources limited their effectiveness. Repairs have been made and are continuing.

Natural gas and oil production is rapidly increasing on pronghorn range with subsequent vegetative removal limiting both forage availability and habitat effectiveness. Habitat loss and disturbance associated with drilling and other energy extraction activities may be a significant factor affecting pronghorn populations.

- ✓ Interspecific competition - No significant, long-term limitations generated by interspecific competition are evident. Pronghorn and livestock can generally exhibit a symbiotic relationship. Direct competition for winter browse forage has occurred during the drought when vegetative production was severely reduced. Dependent upon season of use, vegetative disturbance by cattle grazing may enhance the production of annual forbs and shrubs. Conversely, the suppression of forbs and shrubs by pronghorns may enhance grass production. Pronghorns exhibit minimal use of grass in their diets. Presently, all pronghorn habitat is grazed by domestic stock. The eastern (Archie Bench and East Bench) and western (Wild Horse Bench and Willow Creek) expanses receive winter use by domestic sheep while the center (Middle Bench, Seep Ridge and Willow Creek) is generally spring grazed by cattle.

## **HABITAT MANAGEMENT OBJECTIVES**

- ✓ Livestock grazing - Support proper domestic grazing on all identified pronghorn habitat within approved grazing allotments and seasons.

- ✓ Water development - Develop, repair and enhance water sources to improve pronghorn habitat and distribution.
- ✓ Vegetation - Support and encourage land management agencies and livestock producers in range improvement practices.

## **HABITAT MANAGEMENT STRATEGIES**

- ✓ Water development - Due to low annual precipitation, ponds and other natural run-off catchments are limited in their duration. The construction and distribution of man-made guzzlers has provided a boon to pronghorn welfare and population distribution. Many of these structures have been repaired recently and are being maintained regularly to aid all wildlife in the salt desert shrub communities.
- ✓ Vegetation management - Low precipitation and the invasion threat of weedy species such as cheat grass, halogeton and Russian thistle limit possibilities for vegetation manipulation projects. The best approach for maintaining or altering vegetative community condition may be through properly targeting acceptable grazing utilization levels and seasons. Support for established domestic grazing under these parameters will continue.